

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-075-24146

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
 DRILL DEEPEN PLUG BACK

b. TYPE OF WELL
 OIL WELL GAS WELL OTHER SINGLE ZONE MULTIPLE ZONE

2. NAME OF OPERATOR
 Southland Royalty Company

3. ADDRESS OF OPERATOR
 P. O. Drawer 570, Farmington, NM 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
 At surface: 1580' FSL & 970' FWL
 At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 Approximately 4 miles NW of Aztec, NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 970'

18. DISTANCE FROM PROPOSED* LOCATION TO NEAREST WELL, DRILLING COMPLETED OR APPLIED FOR, ON THIS LEASE, FT. 500'

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 6298' GR

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	9 5/8"	32.3#	200'	110 Sacks
8 3/4"	7"	23#	5030'	110 Sacks (Stage One)
6 1/4"	4 1/2"	10.5#	4880'-7000'	265 Sacks (Stage Two)
6 1/4"	4 1/2"	11.6#	7000'-7500'	310 Sacks

5. LEASE DESIGNATION AND SERIAL NO.
 SF-077652

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
 East

9. WELL NO.
 #7E

10. FIELD AND POOL, OR WILDCAT
 Basin Dakota

11. SEC., T., E., M., OR BLK. AND SURVEY OR AREA
 Blanco Pictured Cliffs

Section 14, T31N, R12W

12. COUNTY OR PARISH
 San Juan

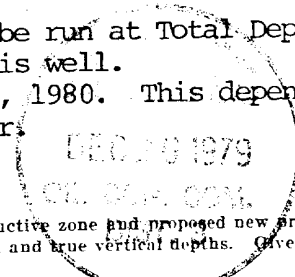
13. STATE
 New Mexico

17. NO. OF ACRES ASSIGNED TO THIS WELL
 320/160 w/28006/139.29

20. ROTARY OR CABLE TOOLS
 Rotary

22. APPROX. DATE WORK WILL START*
 March 15, 1980

Surface formation is Nacimiento.
 Top of Ojo Alamo sand is at 1340'.
 Top of Mesa Verde sand is at 4320'.
 Fresh water mud will be used to drill from surface to Intermediate TD.
 Gas will be used to drill from Intermediate TD to Total Depth.
 It is anticipated that a GR-Induction and GR-Density log will be run at Total Depth.
 No abnormal pressures or poisonous gases are anticipated in this well.
 It is expected that this well will be drilled before August 31, 1980. This depends on time required for approval, rig availability and the weather.
 Gas is dedicated.



IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED [Signature] TITLE District Engineer DATE 12-4-79

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

DKPwa 454
 with 1/15/1980
 ah 5/1/81

NMOCC

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-107
Revised 10-1-78

All distances must be from the outer boundaries of the Section

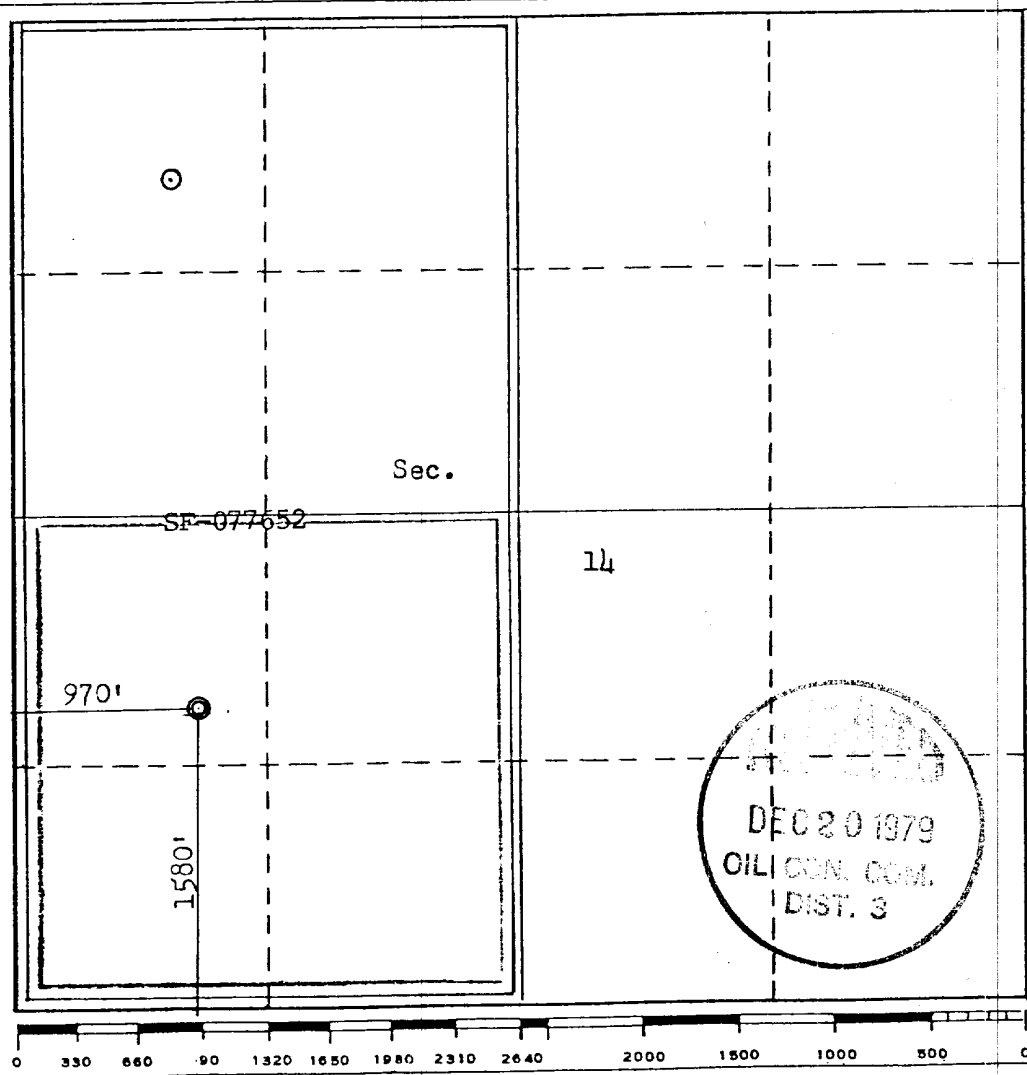
Operator SOUTHLAND ROYALTY COMPANY			Lease EAST		Well No. 7-E
Unit Letter L	Section 14	Township 31N	Range 12W	County San Juan	
Actual Footage Location of Well: 1580 feet from the South line and 970 feet from the West line					
Ground Level Elev. 6298	Producing Formation Dakota / Pictured Cliffs		Pool Basin / Blanco Aztec	Dedicated Acreage: 280.06 320/160 ^{129.28} Acres	

- Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

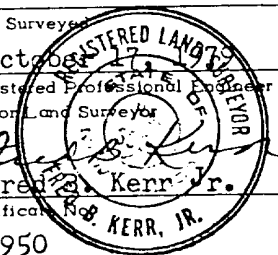
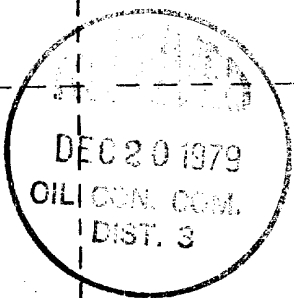
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

C. C. Parsons

Name
Curtis C. Parsons
Position
District Engineer
Company
Southland Royalty Company
Date
December 4, 1979

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
October 17, 1979
Registered Professional Engineer and/or Land Surveyor
Fred A. Kerr, Jr.
Fred A. Kerr, Jr.
Certification No. **3950**



DRILLING SCHEDULE - EAST #7E

Location: 1580' FSL & 970' FWL, Section 14, T31N, R12W, San Juan County, New Mexico

Field: Basin Dakota/Blanco Pictured Cliffs

Elevation: 6298' GR

Geology:

Formation Tops:	Ojo Alamo	1340'	Point Lookout	5080'
	Fruitland	2345'	Gallup	6420'
	Pictured Cliffs	2785'	Graneros	7195'
	Cliff House	4320'	Dakota	7310'
	*Intermediate TD	5030'	Total Depth	7500'

*INTERMEDIATE TD IS CRITICAL. DO NOT DRILL PAST 5030'. ACCURATE STRAP WILL BE NECESSARY.

Logging Program: IES and GR-Density from Intermediate TD to surface casing.
GR-Induction and GR-Density from Total Depth to Intermediate TD.

Coring Program: None

Natural Gauges: Gauge well at TD. Also gauge any noticeable increases in gas.
Record all gauges in tour book and turn in on morning report.

Drilling:

Contractor: Tool Pusher:
SRC Representative: SRC Ans. Service: 325-1841
Dispatch Number: 325-7391

Mud Program: Fresh water mud from surface to Intermediate TD.
Gas from intermediate to Total Depth.

Materials:

Casing Program:	Hole Size	Depth	Casing Size	Wt. & Grade
	12 1/4"	200'	9 5/8"	32.3# H-40
	8 3/4"	5030'	7"	23# K-55
	6 1/4"	4880'-7000'	4 1/2"	10.5# K-55
	6 1/4"	7000'-7500'	4 1/2"	11.6# K-55

Float Equipment:

9-5/8" Surface Casing: Pathfinder type "A" guide shoe.

7" Intermediate Casing: Pathfinder type "A" guide shoe. Self-fill insert float valve run 2 joints above shoe. 5 Pathfinder rigid stabilizers run every other joint above shoe. Run Dowell stage tool at 2990'. Run cement basket below and 5 Pathfinder rigid stabilizers above tool.

4-1/2" Liner: Liner hanger with neoprene pack-off. Pathfinder type "AP" guide shoe and type "A" float collar.

Tubing:

Wellhead Equipment: 9 5/8" x 10", 2000# casing head with 7" casing hanger
10", 2000# x 6", 2000# tubing head and tree

Cementing Program

9-5/8" surface casing: 110 sacks (125 cu. ft.) of Class "B" with 1/4# gel flake per sack and 3% Ca Cl₂. WOC 12 hours. Test to 600# prior to drilling out. (Volume is 100% excess.)

7" Intermediate casing: STAGE ONE: 110 sacks (160 cu. ft.) of 50/50 Class "B" Poz with 6% gel (mixed with 7.2 gals water per sack). (Volume is 50% excess to cover top of Cliff House.)

STAGE TWO: 195 sacks (372 cu. ft.) of 50/50 Poz with 6% gel, followed by 70 sacks of Class "B" with 2% CaCl₂. (Volume is 50% excess to cover top of Ojo Alamo)

WOC and circulate between stages as required by well conditions. WOC 12 hours. Test to 1000 psi before drilling out.

4-1/2" Liner: 310 sacks (457 cu. ft.) of 50/50 Poz with 6% gel, 1/4# gel flake per sack, 0.6% Halad 9 or equivalent. (70% excess)

If hole gets wet and mist drilling is required, use 360 sacks (538 cu. ft.) for 100% excess.

Precede cement with 20 barrels of gel water.

L. O. Van Ryan

Date

BJM/ke



Southland Royalty Company

December 4, 1979

United States Geological Survey
Mr. James Sims
P. O. Box 959
Farmington, NM 87401

Dear Sir:

Enclosed please find a map showing existing roads and planned access roads to Southland Royalty Company's _____ East #7E _____ well.

The locations of tank batteries and flow lines will be on location with well. A burn pit will be provided for disposal of trash. Cuttings, drilling fluid and produced fluids will be put into the reserve pit and properly disposed of depending on amount and type of fluids.

There will be no camps or airstrips.

Also, enclosed is a location layout showing approximate location of rig, pits and pipe racks.

Water supply will be _____ Farmer's Ditch _____.

The location will be restored according to Bureau of Land Management standards. This work will begin when all related construction is finished.

Mr. Ross Lankford will be Southland Royalty Company's field representative supervising these operations.

Yours truly,

Curtis C. Parsons
District Engineer

CCP/ke



Southland Royalty Company

December 4, 1979

United States Geological Survey
Mr. James Sims
P. O. Box 959
Farmington, NM 87401

RE: Blowout Preventer Plan

Dear Sir:

All drilling and completion rigs will be equipped with 6" or larger double hydraulic blowout preventers and a hydraulic closing unit with steel lines.

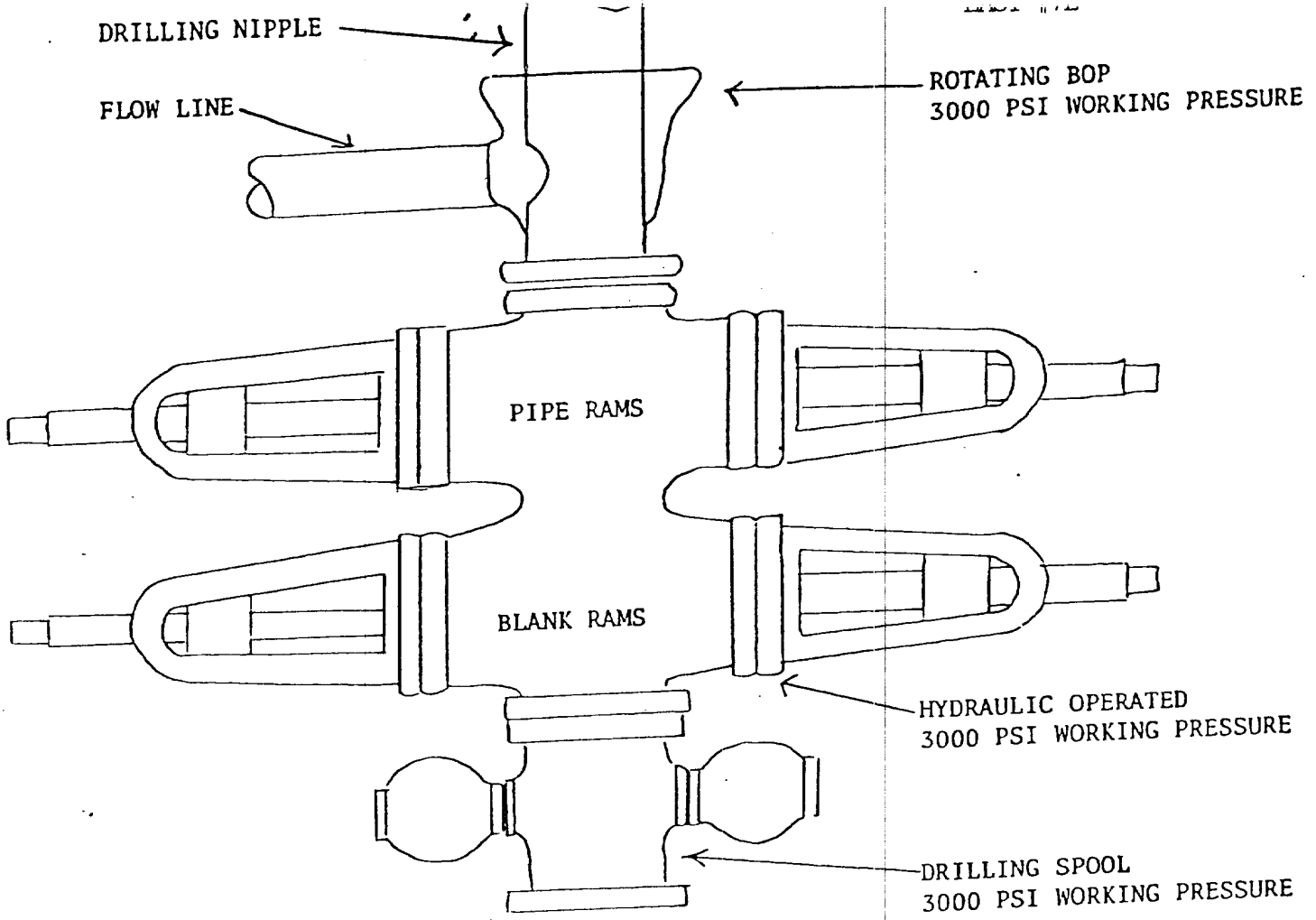
The preventer is 3000# working pressure and 6000# test pressure.

All crews will be thoroughly trained in the operation of this preventer. The preventer will be tested frequently enough to insure proper operation.

Yours truly,

Curtis C. Parsons
District Engineer

CCP/ke



PREVENTERS AND SPOOLS ARE TO HAVE THROUGH BORE OF 6" - 3000 PSI OR LARGER



Southland Royalty Company

United States Geological Survey
Mr. James Sims
P. O. Box 595
Farmington, NM 87401

Dear Sir:

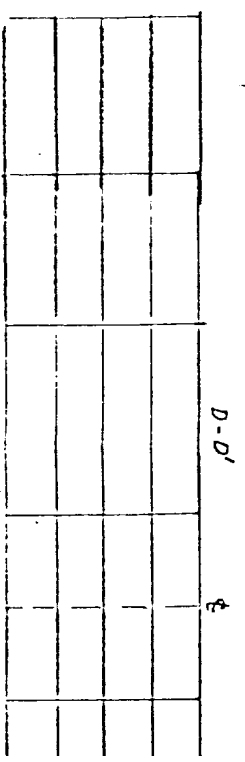
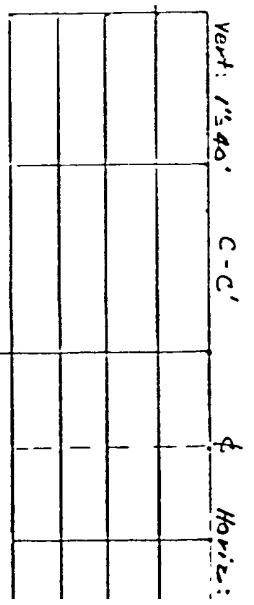
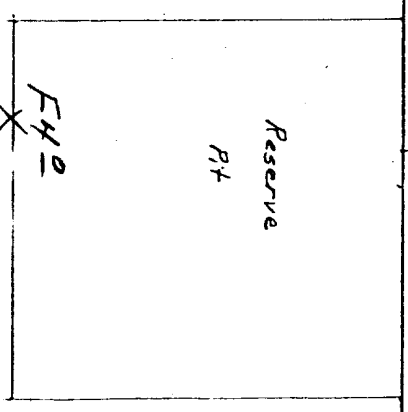
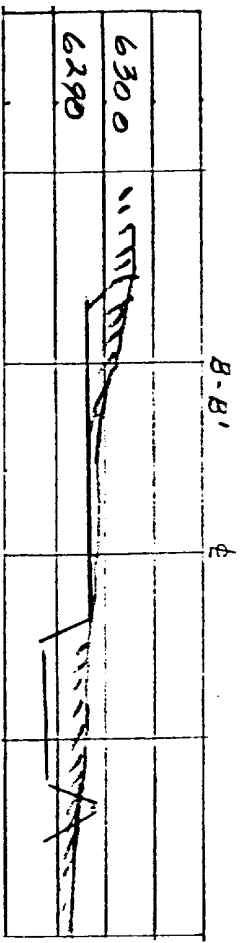
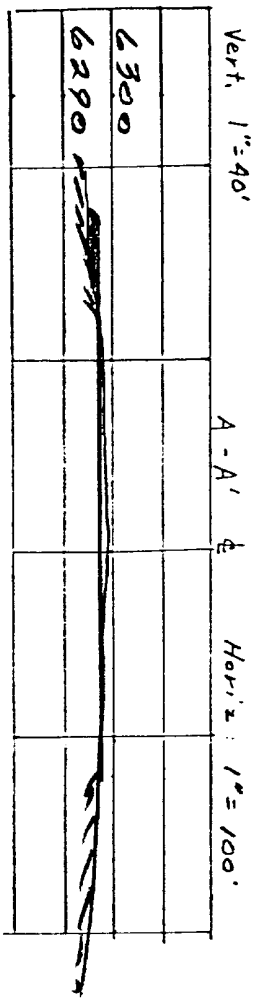
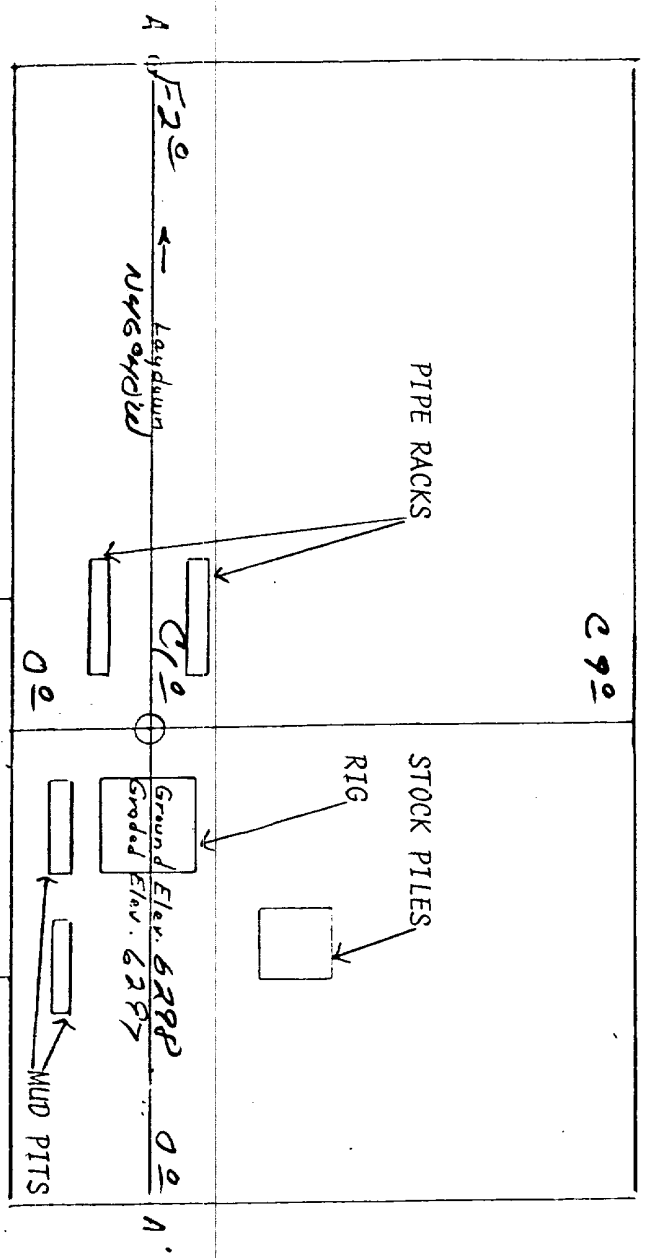
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Southland Royalty Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Date: December 4, 1979

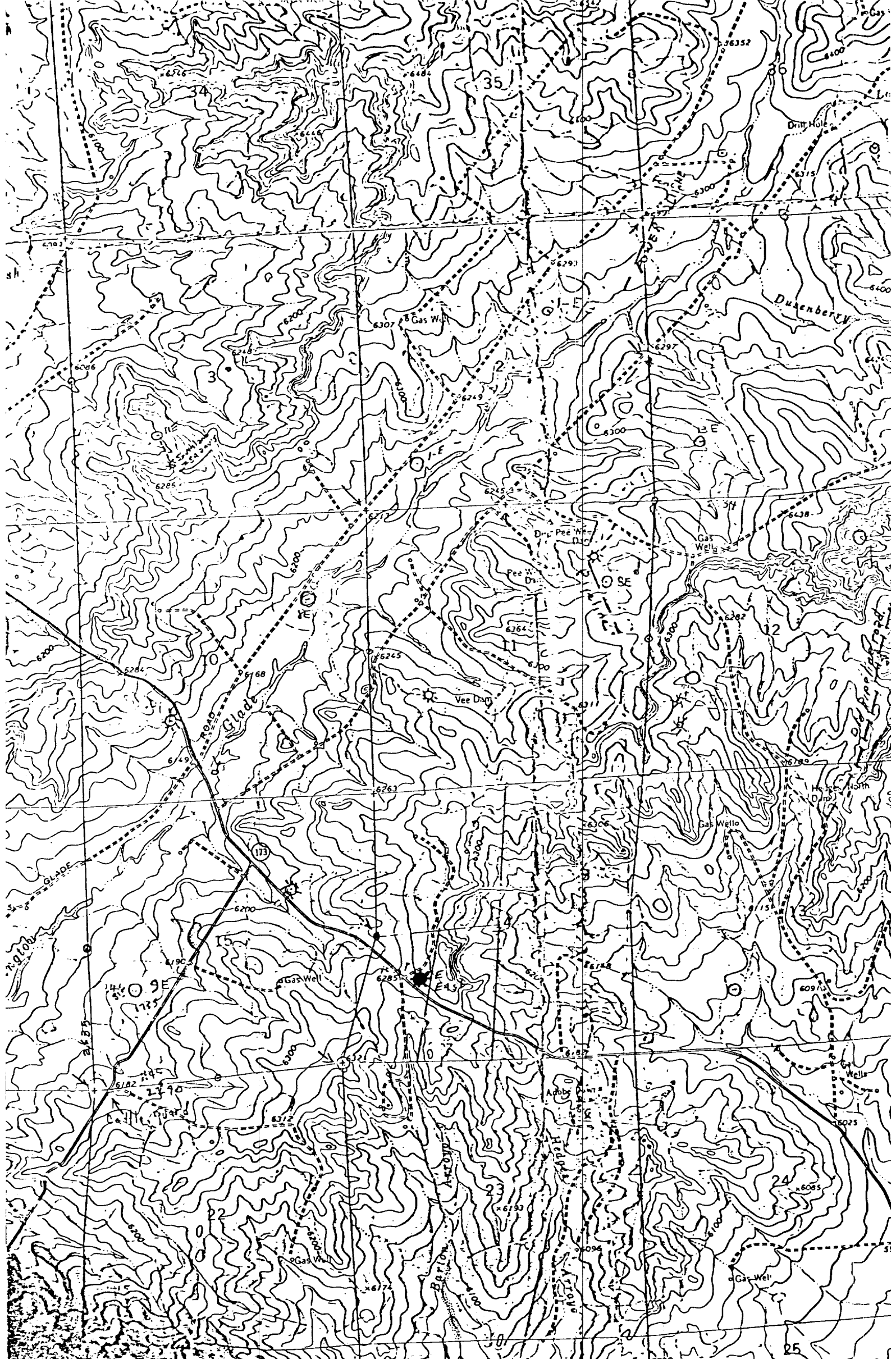
L. O. Van Ryan
District Production Manager





LOVR/ke

Location Profile for
 SOUTHLAND ROYALTY CO. #7E EAST
 1580' FSL 970' FWL Sec 14-T31N-R12W SAN JUAN COUNTY, NEW MEXICO

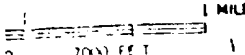


KEPP LAND SURVEYING
 Date: _____



PROPOSED LOCATION 
 EXISTING LOCATIONS 
 PROPOSED ROAD 
 EXISTING ROADS 

Vicinity Map for
 SOUTHLAND ROYALTY CO. #7E EAST
 1580'FSL 970'FWL Sec. 14-T31N-R12W
 SAN JUAN COUNTY, NEW MEXICO

R. 12 W

 1 MILE
 0 1000 FEET